

## **Energy and Telecommunications Interim Committee**

**September 22, 2005**

**(Revised 9/28/05)**

### **Otter Creek Project Area**

#### **Brief Background**

The Otter Creek tracts are the end product of the controversy over the proposed Crown Butte Mine. The Crown Butte mine was to be located near Yellowstone Park, but did not involve state trust land. Because of the controversial location, the Federal government bought out the mining rights in order to prevent the operator from obtaining a mining permit from the Montana Department of Environmental Quality. The State of Montana argued this Federal action hurt Montana through loss of jobs and taxes that would have been generated if the mine had been allowed to proceed.

The Federal government initially discussed legislation that would convey to the State, either \$20 million cash, the Otter Creek tracts, or other mineral rights valued at \$20 million and agreed to by the State and Federal government. Subsequent discussions ultimately yielded federal legislation that offered either the Otter Creek tracts or other mineral rights with a value of \$10 million. The State chose the Otter Creek tracts. They are located about 60 miles south of Rosebud, Montana (or about 10 miles south of Ashland, Montana). Otter Creek flows northward through the Otter Creek tracts to its confluence with the Tongue River at Ashland. The Custer National Forest is adjacent to the Otter Creek tracts on both the east and west sides, with the eastern boundary of the Northern Cheyenne Reservation (Tongue River) approximately 10 miles to the west. The Otter Creek project area is currently viewed as containing up to three adjacent areas of potential reserves, which are referred to as "Otter Creek Tracts 1,2, and 3."

The Federal conveyance to the State was approved by the State Land Board on May 20, 2002, and certified by the Governor's Executive Order No. 12-02 on May 28, 2002. The Federal conveyance includes only mineral estate; no surface ownership was transferred. Pursuant to Article X, Section 2 of the Montana Constitution, these tracts became part of the common (i.e. K-12) school trust. Surface ownership is a combination of retained Federal and private ownership. The tracts conveyed to the State total 7,623 acres and are depicted on the attached map as darker blue with cross hatching. The State already possessed some state school trust ownership within the Otter Creek area, which are depicted in lighter blue. This brings the State's full ownership interest to about 9,543 acres.

Prior to the Federal conveyance of the Otter Creek tracts, the Land Board entered into a February 19, 2002 Settlement Agreement with the Northern Cheyenne Tribe (NCT). The NCT had threatened to file suit against the Federal government opposing the transfer, unless the State entered into an agreement with NCT. This agreement places certain restrictions on any coal leases that may ultimately be issued by the Land Board.

## **Property Information**

Preliminary estimates place potential state coal reserves in excess of 500 million tons. However, this would be a new mine in an area where mining does not currently exist. A rough estimate of the initial capital cost required for a typical 15-20 million ton/year mine is \$160 million.

Anticipated coal quality in the Otter Creek area is 8,600 – 8,800 btu/lb, with relatively low sulfur (i.e. “compliance” coal), which is good, but with relatively high sodium content, which is bad. The higher sodium content limits existing markets to those plants in the upper mid-West that possess boilers and related equipment that can handle high sodium coal. To reach these markets, the mine area would need rail access to the north (the northern portion of proposed Tongue River railroad) to connect it with existing rail-lines at Miles City, Montana. The most favorable route would require construction of approximately 90 miles of railway. A rule of thumb for railway construction is \$1.0 – 1.5 million per mile.

The other potential market would be on-site conversion of coal to electricity or liquid hydrocarbons. Such processes require significant additional capital investment for plant construction and power lines or pipelines to market.

The State’s ownership, though significant, comprises about one-half of the area – in a checkerboard pattern. Great Northern Properties (GNP) – is the successor-in-title to Meridian Minerals Company (BNSF Railroad) coal properties which, in this area consist of the original railroad grant of alternating sections. The conveyance of the other alternating sections from the BLM to the State of Montana results in a “checkerboard” pattern of ownership. If a mine is to be developed, it will, by necessity, include both State and GNP coal lands.

## **State/DNRC Activity to Date**

DNRC and GNP entered into a Memorandum of Agreement consistent with our common goals. We both are interested in this area being evaluated and potentially developed for energy (coal) production. We both understand that a commercial development will require both GNP and DNRC ownership, because of the checkerboard pattern of our respective parcels. We both are interested in coordinating our leasing process so that lease rights issued work together to facilitate prudent development.

The 2003 Legislature passed Senate Bill 409, which identified areas of data acquisition that would be beneficial to prepare a package of tracts for possible leasing. The legislature also included \$300,000 in spending authority for the department to engage in pre-lease data acquisition and evaluation.

DNRC utilized funding authorized by Senate Bill 409 to acquire both coal resource and cultural inventory data. DNRC engaged Kennecott Energy in an exploration process to acquire additional core data and analysis. The drilling program was completed during the 2004 field season, with data delivered to DNRC in October 2004. The primary goals of the drilling and coring program were to develop additional data on sodium and trace elements, and further

delineate the extent of the coal resource. Interested coal companies will utilize this data to further assess their interest in the Otter Creek tracts.

DNRC also contracted a cultural inventory of the state tracts. Fieldwork was conducted during June 2004; the final report was received November 2, 2004. This provides DNRC and interested coal companies with initial information regarding cultural resources in the area. This also would provide additional baseline data with which to engage in the actual inventory and/or mitigation process pursuant to the Land Board's settlement agreement with the Northern Cheyenne Tribe. This process would trigger when a mine plan was actually proposed.

DNRC obtained all technical data available from the Bureau of Land Management (BLM) on the acquired tracts. This data, along with the newly acquired technical and cultural data has been converted to electronic format. GNP also has existing technical data for their Otter Creek coal lands. GNP has agreed to make this data available without charge to interested companies on a confidential basis. DNRC has transferred all data in our possession to electronic format. This data is freely available on a CD. To date, the department has distributed nearly 40 information disks.

In 2004, the BLM recently advised of plans to include a general review of the Otter Creek area as part of their overall update to coal resources in the Powder River Basin. The department provided all available data for their use. The BLM initially projected completion of this review during 2005.

The ultimate goal is a competitive lease sale on a selection of both State and GNP tracts that together encompass an initial logical mining unit. The leasing/bidding process would be coordinated with GNP, so that value is maximized for both coal owners. Matching company interest with an offer for competitive bid is obviously essential. The current focus is therefore a qualitative assessment by DNRC and GNP of company interest, based in part on their review of existing and newly acquired data. This feedback and assessment would provide a basis for DNRC and GNP to determine the timing and nature of subsequent leasing actions. Accordingly, DNRC is participating with GNP in the preparation of a technical resource and market analysis, utilizing both GNP and DNRC data. Notably, this will include the new coal data acquired by the DNRC in 2004 and GNP proprietary data. Completion is expected by fall-2005.

DNRC and GNP are also currently reviewing coal lease contract language, in an effort to produce agreements for both ownerships that are as consistent as possible, and that address both parties' common interests relative to lessee expectations and diligence requirements.

### **Future Activities**

Based on all of the foregoing, DNRC and GNP must then determine the initial logical mine unit area to offer for lease and the timing for a coordinated competitive-bid lease sale. A consensus on the appropriate area to be offered would likely be determined through evaluation of newly acquired data, with discussion between DNRC, GNP, and interested companies. Because of the checkerboard ownership pattern, DNRC and GNP must also reach consensus on the overall timing of offering their respective tracts for lease. At this point, DNRC would prepare an

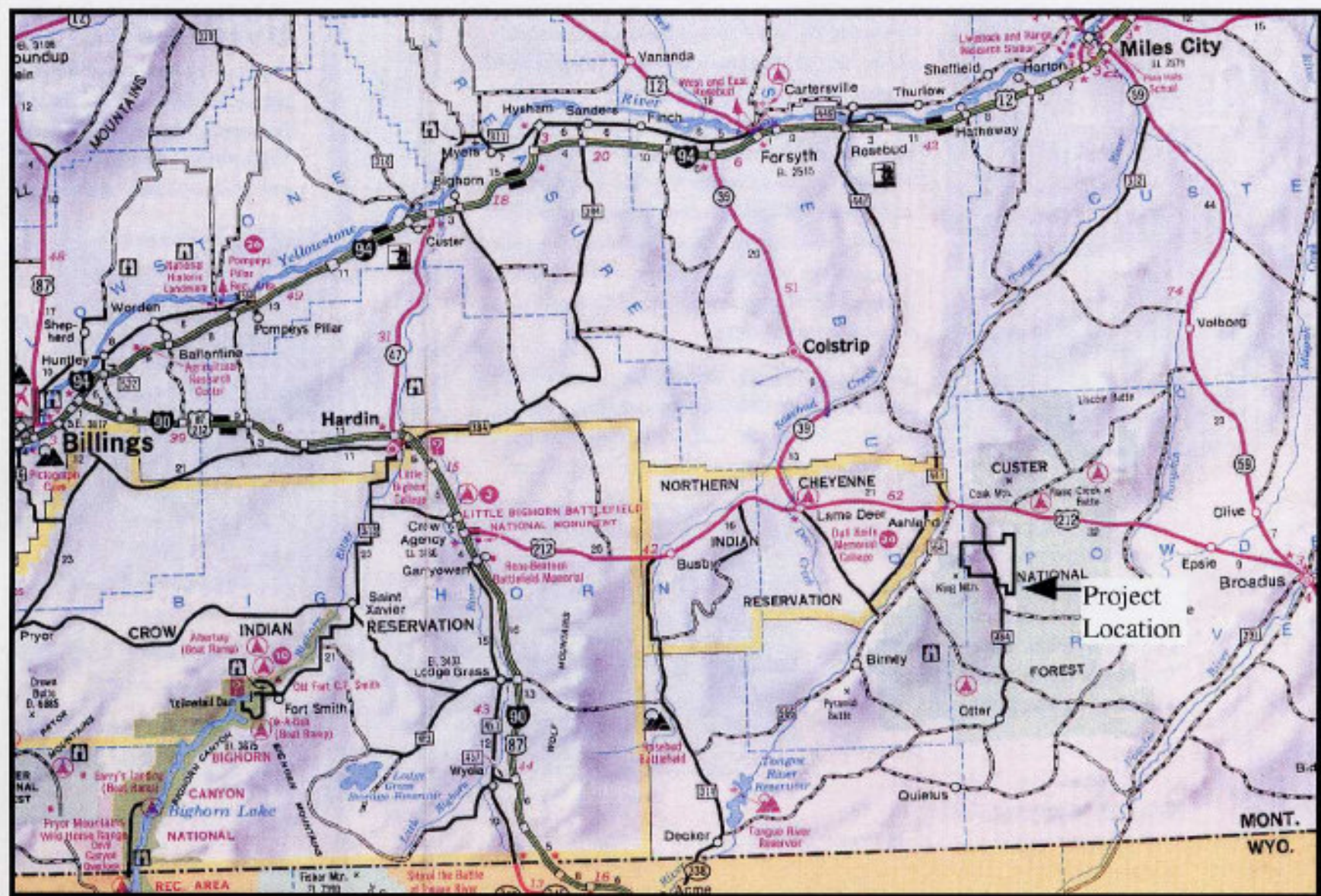
economic appraisal pursuant to 77-3-312, MCA to determine specific lease components (rental, royalty, bonus and related terms) that together comprise fair market value to the common school trust. Like any appraisal, this type of evaluation has a limited “shelf-life,” and therefore should be prepared within a reasonable time prior to the lease sale.

**Attachment**

Otter Creek Property Vicinity and Information Slides (4)

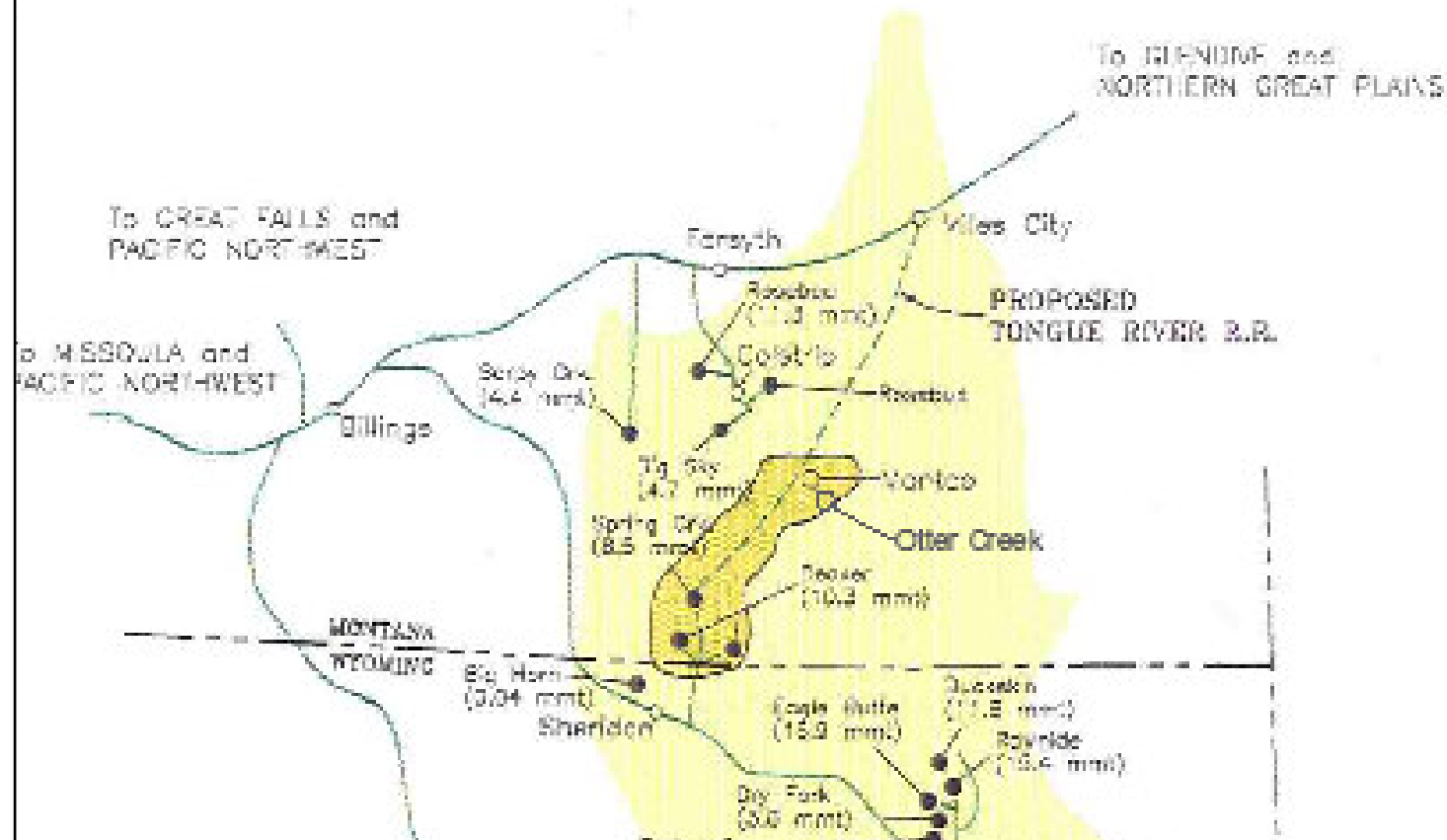
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Otter Creek Vicinity Map

# MONTANA-WYOMING POWDER RIVER BASIN

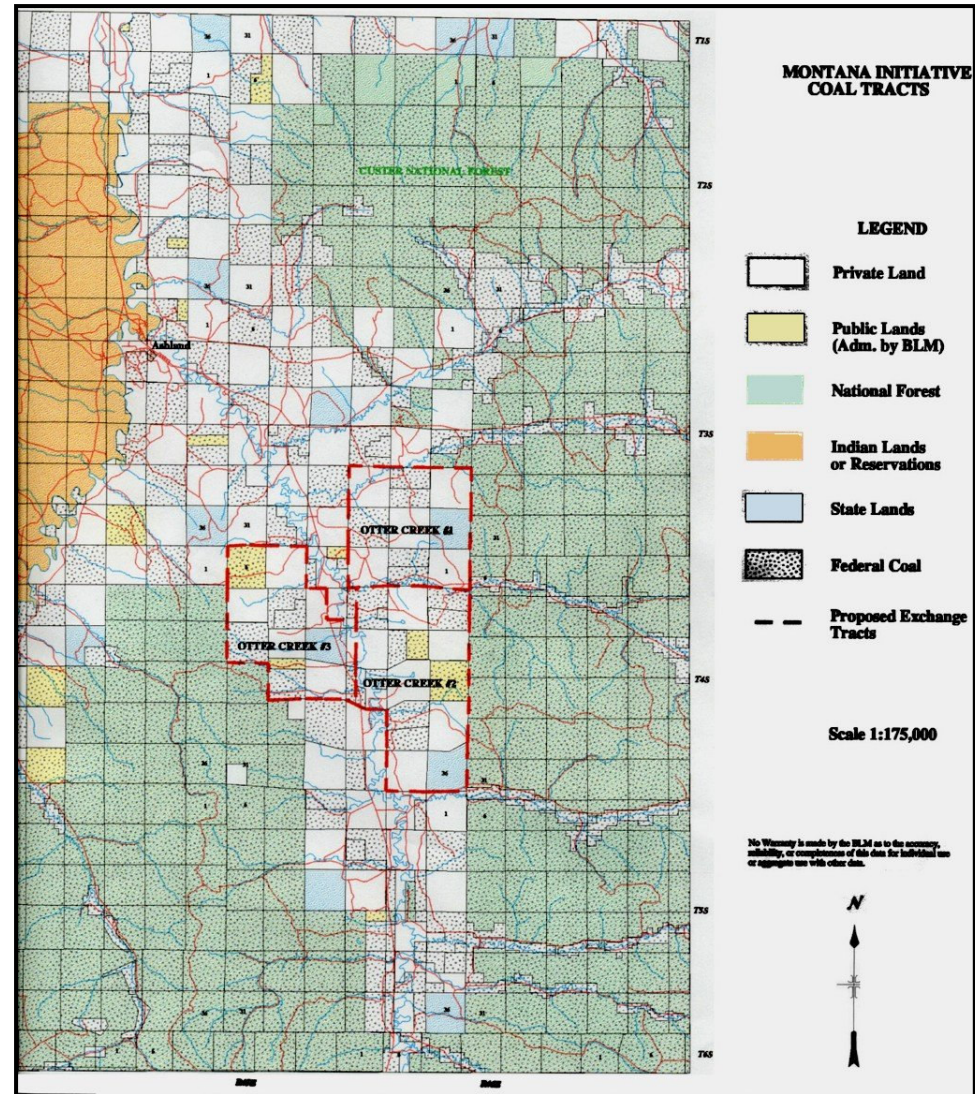


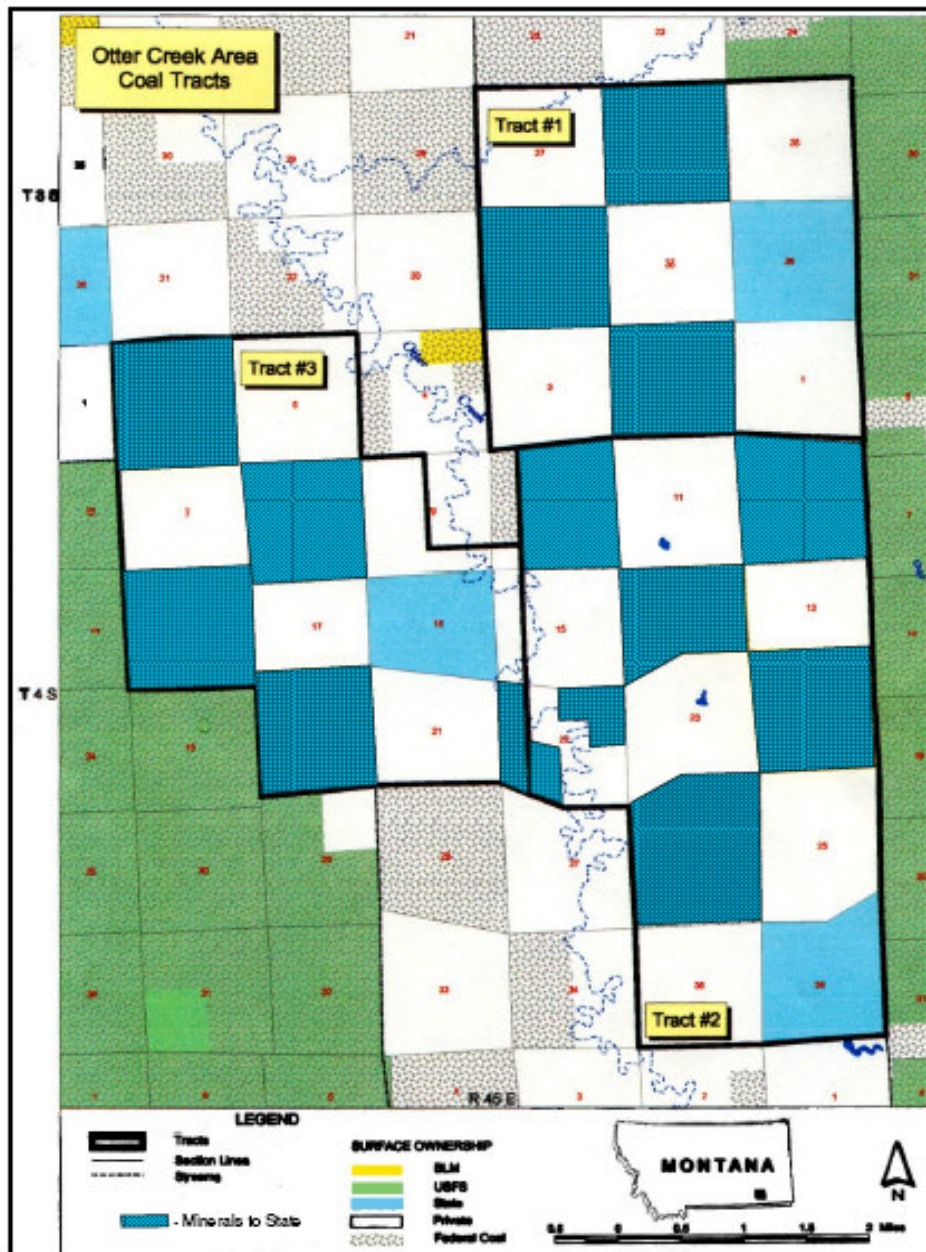
Northern Powder River Basin



# Otter Creek Coal Tracts – Powder River County

- State received 7,623 acres of Fed minerals in May 2002 to offset Fed buyout of Crown Butte. This brings State's total coal ownership to over 9,500 acres. Potential reserves exceed 500 million tons. Located 60 miles south of Rosebud, MT
- Checkerboard ownership with Great Northern Properties (GNP) owning the alternating tracts. DNRC & GNP pursuing coordinated evaluation and leasing per MOA.
- In 2003-04, DNRC completed an initial cultural inventory and acquired additional coal log and core data. Funding from 2003 Legislature. DNRC & GNP now conducting a study of new and existing data, to determine interest, options and parameters for competitive bidding on coal leases.
- Potential markets: Upper midwest: requires Tongue River Railroad and market for higher sodium coal. Local (coal to electricity or coal to liquids): requires plant & delivery infrastructure.





## Otter Creek Project

- Checkerboard ownership – GNP/State (State is Common School Trust Land)
- Potential for three logical mining units (Tract #'s 1, 2 and 3)
- 1.5 billion tons estimated recoverable reserves at less than 3:1 stripping ratio
- Total (all three tracts) school trust share 500-750 million tons, equivalent to \$500-750 million @ \$8/ton
- Coal Quality:
  - 8,600 – 8,800 Btu/lb.
  - 5-9% ash
  - 24-27% moisture
  - 0.2-0.4% sulfur
  - 0.4-0.8 lb. SO<sub>2</sub>/mmBtu
  - 2.0-9.5% Sodium
- Distance to nearest rail transportation:
  - 46 miles to BNSF spur at Colstrip
  - 90 miles to BNSF main line at Miles City